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27683	7590	09/10/2010	EXAMINER	
HAYNES AND BOONE, LLP			BEHARRY, NOEL R	
IP Section			ART UNIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,279

Applicant(s)

ISHIDA ET AL.

Examiner

NOEL BEHARRY

Art Unit

2446

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6, 8-14, 21, 22 and 25-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6, 8-13, 21, 22 and 25-46 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to applicant's response filed under 37 C.F.R. §1.111 in response to a non-final office action. Claims 4, 6, 21, and 25 have been amended and claim 7 has been canceled. Claims 4-6, 8-14, 21, 22, and 25-46 are subject to examination.

Allowable Subject Matter

2. **Claim 14** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is an examiner's statement of reasons for allowable subject matter: The limitations in claim 14 of the server among other things further comprising a client control section for controlling the client device, which selects a specific client device from the list to thereby activate a control program for the specific client device is non-obvious when combined with the limitations of the independent claims as well as the limitations of the dependent claims that it depends on.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 4, 5, 6, 21, 22, 25, 26, 30, 31, 37 - 40 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema et al. (Huitema hereafter)** (US 2002/0073215 A1) in view of **Szucs et al. (Szucs hereafter)** (US 2002/0188741 A1) **Burgess et al. (Burgess hereafter)** (US 2001/0012296 A1).

Regarding claims 4 and 21, Huitema teaches,

an Internet connection system, comprising:

a relay device **(210 of Fig. 2)** connected to a client device **(200 of Fig. 2)** and provided in a first network, the first network communicated in a first protocol **(IPv6); (Par. 0008-0013)** and

a server **(410 of Fig. 3)** connected to the relay device through a second network in a second protocol **(IPv4)**, the second network being the Internet, **(Par. 0032)**

wherein the relay device **(210 of Fig. 2)** comprises:

a client device global address storage section for storing a global address of the client device in the first protocol; **(210 of Fig. 2) [Routers stores the address of its clients and servers in a routing table]**

a server address storage section for storing a global address of the server in the second protocol; **(210 of Fig. 2)** ***[Routers stores the address of its clients and server in the a routing table]***

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; **(210 of Fig. 2)** ***[Routers routes a connection based on the address stored in the routing table]*** and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol, **(Par. 0008-0013)** and

wherein the server **(410 of Fig. 3)** comprises:

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device; **(Par. 0032)**

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; **(Par. 0032)** and

a second routing device for routing a connection to the relay device based on the global address of the client device managed by the client device global address management device. **(Par. 0032)**

Huitema fails to explicitly teach,
a Web server device for receiving a selection of the client device and an instruction for controlling the client device from a user via the Internet,
a model identification section for determining if the client device is of a predetermined manufacturer model; and
a client device control section for receiving the selection of the client device and the instruction from the Web server device, receiving the manufacturer model of the client device or the relay device determined in the model identification section, and sending a packet including a command to the client device based on the instruction and the manufacturer model.

However, **Szucs** teaches,
a Web server device for receiving a selection of the client device and an instruction for controlling the client device from a user via the Internet, (**Szucs; it is known to control and diagnose home network devices from remote, Par. 0002-0003**)

a client device control section for receiving the selection of the client device and the instruction from the Web server device, and sending a packet including a command to the client device based on the instruction and the model. (**Par. 0036**)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Szucs** in order to allow a home network device to be controlled and diagnosed (**Par. 0002**).

The modified **Huitema – Szucs** reference fails to explicitly teach,
a model identification section for determining if the client device is of a
predetermined manufacturer model.

receiving the manufacturer model of the client device or the relay device
determined in the model identification section

It would have been obvious to one of ordinary skilled in the art at the time of the
invention to create the invention of **Huitema** to include the above recited limitations as
taught by **Burgess** in order to selectively control access of a device (**Par. 0010-0011**).

However, **Burgess** teaches,
a model identification section for determining if the client device is of a
predetermined manufacturer model. **(forwarding of a data packet is prevented
unless a media access control address in the packet matches an address in the
table, Par. 0011)**

receiving the manufacturer model of the client device determined in the model
identification section. **(forwarding of a data packet is prevented unless a media
access control address in the packet matches an address in the table, Par. 0011)**

It would have been obvious to one of ordinary skilled in the art at the time of the
invention to create the invention of **Huitema - Szucs** to include the above recited
limitations as taught by **Burgess** in order to selectively control access of a device (**Par.
0010-0011**).

Regarding claims 5 and 22, Huitema - Szucs – Burgess teaches,

wherein the server further comprises a communication session disconnection section for halting packet transmissions of packets that the server receives if the model identification section determines that the client device or the relay device is not of the predetermined model. **(Burgess; more particularly the forwarding of a packet may be prevented unless either the specific source address or the specific destination address in the packet matches a permitted media access control address in the table, Par. 0011)**

Regarding claim 6, Huitema - Szucs – Burgess teaches,

wherein the server further comprises a command conversion section for converting said instruction received from the user at the Web server device to a command to be sent to the client device in a predetermined manufacturer model specific format to control the client device based on the manufacturer model determined by the model identification section. **(Szucs; Par. 0046-0047)**

Regarding claim 25, Huitema - Szucs – Burgess teaches,

a server **(Huitema; 410 of Fig. 3)**, used in an Internet connection system which comprises:

a relay device **(Huitema; 210 of Fig. 2)** provided in a first network; and the server connected to a client device through the relay device and the Internet, the client device connected to the first network, **(Huitema; Par. 0032)** comprising:

a client device address management device for managing an address of the

client device connected to the relay device in association with an address of the relay device; **(Huitema; Par. 0032)**

a routing device for routing a connection, the connection from the Internet to the client device, to the relay device connected to the client device based on the address of the client device managed at the client device address management device; **(Huitema; Par. 0032)**

a model identification section for determining if the client device is of a predetermined manufacturer model and/or the relay device is of a predetermined manufacturer model; **(Burgess; forwarding of a data packet is prevented unless a media access control address in the packet matches an address in the table, Par. 0011)**

a command conversion section for converting said instruction received from the user at the Web server device to a command to be sent to the client device in a predetermined format to control the client device based on the manufacturer model determined by the model identification section. **(Szucs; Par. 0046-0047)**

Regarding claim 26, Huitema - Szucs – Burgess teaches, further comprising:

a communication session disconnection section for halting of packets that the server receives if the model identification section determines that the client device or the relay device is not of the predetermined manufacturer model. **(Burgess; more particularly the forwarding of a packet may be prevented unless either the specific source address or the specific destination address in the packet matches**

a permitted media access control address in the table, Par. 0011)

Regarding claim 30, Huitema - Szucs – Burgess teaches, further comprising:

a state information obtaining section for obtaining at least one of location information of the client device. (Huitema; 100 of Fig. 1) ***[Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]***

Regarding claim 31, Huitema - Szucs – Burgess teaches,

wherein the state information obtaining section obtains at least one the location information of the client device using a method according to a manufacturer model of the client device. (Huitema; 100 of Fig. 1) ***[Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]***

Regarding claim 37, Huitema - Szucs – Burgess teaches,

wherein the relay device is provided in the client device. (Huitema; Par. 0036)

Regarding claim 38, Huitema - Szucs – Burgess teaches, further comprising:

a packet processing device for capsulating/decapsulating packets, the packets being in a first protocol, using a second protocol to thereby establish a tunneling connection with the relay device; (Huitema; Par. 0032)

wherein said client device address management device a global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; (**Huitema; Par. 0032**) and

a routing device for routing a connection to the relay device based on the global address of the client device managed by the client device address management device. (**Huitema; Par. 0032**)

Regarding claim 39, Huitema - Szucs – Burgess teaches,

wherein the first and second protocols are different. (**Huitema; Par. 0025**)

Regarding claim 40, Huitema - Szucs – Burgess teaches,

wherein the first and second protocols are the same. (**Huitema; Par. 0026**)

Regarding claim 45, Huitema - Szucs – Burgess teaches, further comprising:

a filtering processing device for filtering communications to/from the client device according to predetermined rules. (**Huitema; 410 of Fig. 3**)

7. **Claims 12, 32, 33, 36, and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess** in view of **Simpson** (US 6,405,310 B1).

Regarding claims 12, Huitema - Szucs – Burgess fails to explicitly teach,

wherein the server further comprises a search section for searching for the client device or the relay device based on at least one of the global address, the operation state, the usage state, and the location information of the client device or the relay device.

However, **Simpson** teaches,

wherein the server further comprises a search section for searching for the client device based on at least one of the global address of the client device. (**Col 6, Lines 43-62**)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Simpson** in order to discover and locate all devices connected to a network (**Col 6, Lines 43-62**).

Regarding claim 32, Huitema - Szucs – Burgess fails to explicitly teach, further comprising:

a client device control section for controlling the client device,

wherein the client device control section comprises a means for displaying to a user at least one of the operation state, the usage state, and the location information of the client device.

However, **Simpson** teaches, further comprising:

a client device control section for controlling the client device, (**Simpson**;

Abstract)

wherein the client device control section comprises a means for displaying to a user at least one of the operation state, the usage state, and the location information of the client device. **(Simpson; Abstract)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Simpson** in order to manage units in a computer network **(Abstract)**.

Regarding claim 33 and 41, Huitema - Szucs – Burgess – Simpson teaches,

a search section for searching for the client device or the relay device based on at least one of the address, the operation state, the usage state, and the location information of the client device or the relay device. **(Simpson; Col 6, Lines 43-62)**

Regarding claim 36, Huitema - Szucs – Burgess – Simpson teaches, further comprising:

a client device control section for controlling the client device, wherein the client device control section selects a specific client device from the list to thereby activate a control program for the specific client device. **(Simpson; Abstract)**

8. **Claims 8-11, 22, 28 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess** in view of **Ramachandran et al.** (**Ramachandran** hereafter) (US 7,360,245 B1).

Regarding claim 8, Huitema - Szucs – Burgess fails to explicitly teach, further comprising:

a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined network environment type.

However, **Ramachandran** teaches,

a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined network environment type. **(decide whether or not the received IP packet's source IP address lies within the subnet IP address space of the directly connected network of the receiving interface, Col 13, Lines 4-15)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Ramachandran** in order to prevent the network from being used intentionally or unintentionally as a launching pad (intermediary) of a DDOS attack **(Col 13, Lines 23-24)**.

Regarding claim 9, Huitema - Szucs – Burgess - Ramachandran teaches,

wherein the server further comprises a communication session disconnection section for halting transmissions of packets that the server receives if a private network environment connected with the client device is determined to be not of the

predetermined network environment type. **(Ramachandran; prevents source spoofed packet (with a source IP address lying outside the private network's IP address space, i.e., victim's address) from getting out of the private network, Col 13, Lines 19-21)**

Regarding claim 10, Huitema - Szucs – Burgess - Ramachandran teaches,

wherein the server further comprises a state information obtaining section for obtaining at least one of location information of the client device. **(Huitema; 100 of Fig. 1) [Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]**

Regarding claim 11, Huitema - Szucs – Burgess - Ramachandran teaches,

wherein the state information obtaining section obtains at least one of the location information of the client device using a method according to a manufacturer model **(Burgess; Par. 0011)** of the client device. **(Huitema; 100 of Fig. 1) [Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]**

Regarding claim 22, Huitema - Szucs – Burgess - Ramachandran teaches,

wherein the relay device further comprises a communication session disconnection section for disconnecting communication sessions if the model identification section determines that the client device is not of the predetermined

model. **(Burgess; forwarding of a data packet is prevented unless a media access control address in the packet matches an address in the table, Par. 0011)**

Regarding claim 28, Huitema - Szucs – Burgess fails to explicitly teach, further comprising:

a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined network environment type.

However, **Ramachandran** teaches, further comprising:
a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined network environment type. **(decide whether or not the received IP packet's source IP address lies within the subnet IP address space of the directly connected network of the receiving interface, Col 13, Lines 4-15)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Ramachandran** in order to prevent the network from being used intentionally or unintentionally as a launching pad (intermediary) of a DDOS attack **(Col 13, Lines 23-24)**.

Regarding claim 29, Huitema - Szucs – Burgess teaches, further comprising:

a communication session disconnection section for disconnecting communication

sessions or halting transmissions of packets that the server receives if an environment of said first network connected to the client device or the relay device is determined not of the predetermined network environment type. **(Ramachandra; prevents source spoofed packet (with a source IP address lying outside the private network's IP address space, i.e., victim's address) from getting out of the private network, Col 13, Lines 19-21)**

9. **Claims 13, 34 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess – Simpson** in view of **Tarr** (US 6,978,314 B2).

Regarding claims 13, 34, and 35, Huitema - Szucs – Burgess – Simpson fails to explicitly teach,

wherein the search section comprises a means for displaying a list of the client devices connected to each of the relay devices.

However, **Tarr** teaches,

wherein the search section comprises a means for displaying a list of the client devices connected to each of the relay devices. **(Abstract)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess – Simpson** to include the above recited limitations as taught by **Tarr** in order to improve the device search capabilities of a network management tool **(Col 2, Lines 25-24)**.

10. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess** in view of **Tarr**.

Regarding claim 27, Huitema - Szucs – Burgess fails to explicitly teach,

wherein the client device includes a peripheral device which is communicable with the relay device but cannot by itself connect to the Internet.

However, **Tarr** teaches,

wherein the client device includes a peripheral device which is communicable with the relay device but cannot by itself connect to the Internet. (**printer; Col 3, Lines 21-34**)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Tarr** in order to be able to connect other devices that can be connected to the network to allow other users on the network to use the device (**Col 3, Lines 21-34**).

11. **Claim 42** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess - Simpson** in view of **Zenchelsky et al. (Zenchelsky hereafter)** (US 6,233,686 B1)

Regarding claim 42, Huitema - Szucs – Burgess - Simpson fails to explicitly teach,

a connection requester authentication section for authenticating a user who requested a connection to the client device to thereby permit or deny the connection to the client device.

However, **Zenchelsky** teaches,

a connection requester authentication section for authenticating a user who requested a connection to the client device to thereby permit or deny the connection to the client device. (**Fig. 1 & Col 2, Lines 5-25**)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema – Burgess – Hovell - Simpson** to include the above recited limitations as taught by **Zenchelsky** in order to implement security policy to restrict access to a network to a predetermined set of users. (**Col 2, Lines 5-25**)

12. **Claim 43** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess** in view of **Hovell** et al. (**Hovell** hereafter) (US 7,188,191 B1).

Regarding claim 43, Huitema - Szucs – Burgess fails to explicitly teach, further comprising:

a tunneling connection information management device for managing information of the tunneling connection between the relay device and the server, wherein the tunneling connection information management device sends a notification to

the relay device of the global address of the server in the second protocol, and sends a notification to the server of the global address of the relay device in the second protocol and of an entirety or part of the global address of the client device in the first protocol.

However, **Hovell** teaches, further comprising:

a tunneling connection information management device for managing information of the tunneling connection between the relay device and the server, wherein

the tunneling connection information management device sends a notification to the relay device of the global address of the server in the second protocol, and sends a notification to the server of the global address of the relay device in the second protocol and of an entirety or part of the global address of the client device in the first protocol.

(Col 7, Line 52 – Col 8 Line 40)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess** to include the above recited limitations as taught by **Hovell** in order to allow the source host to know the address of the destination host.

13. Claims 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema - Szucs – Burgess – Hovell** in view of **Zenchelsky**.

Regarding claim 44, Huitema - Szucs – Burgess – Hovell fails to explicitly teach,

the tunneling connection information management device authenticates the relay device or the server to obtain an authentication result and, if the authentication result is

positive, sends the notification.

However, **Zenchelsky** teaches,
the tunneling connection information management device authenticates the relay device or the server to obtain an authentication result and, if the authentication result is positive, sends the notification. **(Fig. 1 & Col 2, Lines 5-25)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema - Szucs – Burgess – Hovell** to include the above recited limitations as taught by **Zenchelsky** in order to implement security policy to restrict access to a network to a predetermined set of users. **(Col 2, Lines 5-25)**

Regarding claim 46, Huitema - Szucs – Burgess – Zenchelsky teaches,
a filtering rule setup section for providing an interface for editing the predetermined rules. **(Col 4, Lines, 23-41)**

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOEL BEHARRY whose telephone number is (571)270-5630. The examiner can normally be reached on M-T 10am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on 571-272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. B./
Examiner, Art Unit 2446

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/Benjamin R Bruckart/

Primary Examiner, Art Unit 2446